

Microsoft Azure Security

Protecting mission-critical cloud

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Microsoft Azure, a strong foundation

Azure Government

Physically
separated instance
of Microsoft Azure



The only
hyper-scale cloud
built specifically for
U.S. government



Meets the most
complex compliance
standards



Designed to exceed
U.S. government
requirements



Supports the broadest
selection
of services, tools,
and languages



Microsoft Azure



Productive



Hybrid



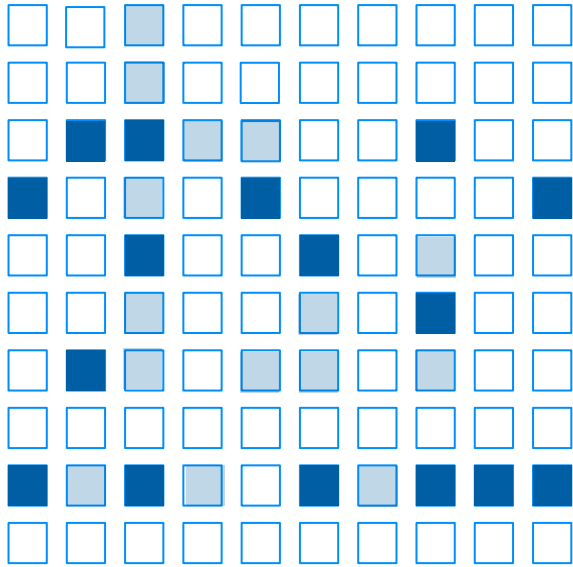
Intelligent



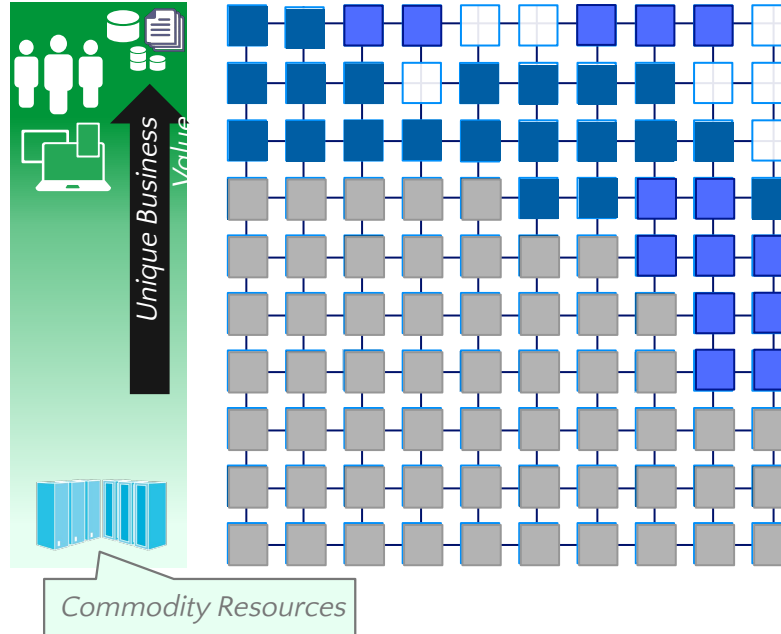
Trusted

Microsoft Azure, improving your security posture

TRADITIONAL APPROACH



CLOUD-ENABLED SECURITY



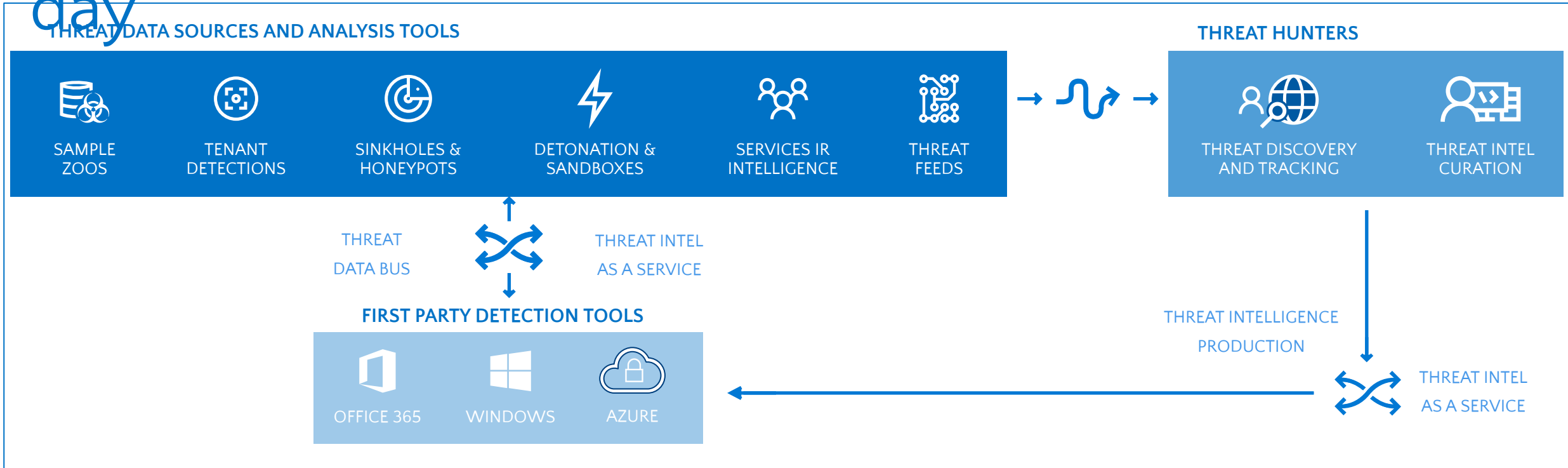
Cloud Technology enables security to:

- Shift commodity responsibilities to provider and re-allocate your resources
- Leverage cloud-based security capabilities for more effectiveness
- ⊞ Use Cloud intelligence improve detection/response/time

Security is a challenging and under-resourced function

- Satisfied responsibility
- Unmet responsibility
- Partially met responsibility
- Cloud Provider responsibility

Microsoft Threat Intelligence, 6.5 Trillion signals per day



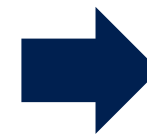
Next-gen analytics built from security awareness and endpoint data



Enhanced correlation driven by big data + machine learning



Enables **customer-focused** threat intelligence



Relevant, Accurate and Actionable intelligence – enriching the **Intelligent Security Graph**

Microsoft Azure, enabling a trusted and compliant cloud

Dynamic and adaptive risk-based analysis and threat monitoring

565 OF 1140

Advanced data security

Adaptive application controls

Just in time VM access

Adaptive network hardening

| | | | |
|--|-----|---------------------------|-------------|
| Vulnerabilities in security configuration on your machines should be remediated | +30 | 1 of 20 virtual machines | <div></div> |
| An Azure Active Directory administrator should be provisioned for SQL servers | +20 | 2 of 2 SQL servers | <div></div> |
| Web Application should only be accessible over HTTPS Quick Fix! | +20 | 10 of 10 web applications | <div></div> |
| Network Security Group rules for Internet facing virtual machines should be hardened | +2 | 2 of 20 virtual machines | <div></div> |

Blueprints for achieving continuous compliance with industry standards and organization initiatives

Failed 116

Passed 226

Skipped 1

NIST SP 800-53 R4

10 of 25 passed controls

1. ASC Custom Initiative

| Assessment | Resource Type | Failed Resources | Severity |
|---|---------------|------------------|----------|
| Audit virtual machines without disaster recovery configured | Custom | Azure resources | 30 of 30 |

Hyper-scale cloud with 91 compliance frameworks built-in

US GOV

Moderate JAB P-ATO

High JAB P-ATO

DoD DISA SRG Level 2

DoD DISA SRG Level 4

DoD DISA SRG Level 5

SP 800-171

FIPS 140-2

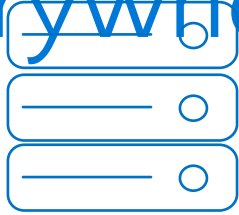
Section 508 VPAT

ITA R

CJI S

IRS 1075

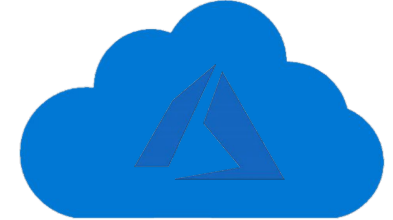
Microsoft security, protecting innovation everywhere



Intelligent Edge



Security from chip to cloud



Intelligent Cloud



Applications



Infrastructure



Data



Identity



Devices



Hybrid



Innovation



Agility



Scale

Microsoft Azure HPC

Tim Carroll
Microsoft US
Director, Public Research



Impediments to Cloud Adoption in Federal Agencies

- Primary hurdles are **operational, budgetary** and **cultural**
- Traditional scoping, budgeting and evaluation practices do not align to evaluating cloud
- Scarcity of in-house technical resources and reference customers creates challenge of “impartial” guidance
- 3 constituents: users, operations and management hold different requirements and perspectives on cloud. Need to align to move forward effectively
- Cloud-specific tools and data management complicate multi-cloud strategy
- The cloud providers struggle with this as well and are figuring this out as well

If Only One Thing... Start with the Workflow

- Infrastructure is the end, not the beginning
- Cloud addresses the problem differently – and impacts procurement
 - Start at workflows and work back
 - Once the workloads are understood, cost are more accurate than the traditional extrapolation method
- Greater performance and cost-efficiency will be realized in this step than any RFP, bake-off or price negotiation

